

REMARKS

Reconsideration of the pending application is respectfully requested on the basis of the following particulars.

1. Amendment of the Claims

Claim 46 is amended to correct the dependency from claim 1 to claim 18. Acceptance of this amendment is respectfully requested in the next Office communication.

2. Overview of Prior Art Rejections

Applicants submit that none of the prior art documents identified and discussed in the outstanding Office action, whether considered individually or collectively, disclose or suggest each and every feature, and combinations of such features of the security paper and method for forming the same according to the pending claims.

In each of the independent claims of the pending application, a security paper is described that requires a dirt repellant surface coating composition specifically lacking a filler substance, and having an acrylate system as the sole binder. For the reasons made known in the following remarks, it will be shown that none of the cited prior art documents disclose this coating composition, and that one skilled in the art of security paper would not be motivated by the teachings of such prior art documents to make the inventive coating composition of the pending claims.

Before proceeding to the specific prior art documents, Applicants argue that the prior art documents which cite acrylic adhesives do not teach the dirt repellant coating composition of the pending claims. It is readily known that an adhesive does not repel dirt but attracts it. As such, the dirt adheres to the adhesive and cannot be easily removed. Therefore, it is submitted that the cited prior art documents, which describe acrylate adhesive systems, are disqualified

from teaching a dirt repellant surface due to the inherent nature of acrylic adhesives.

From the rationale used to reject the pending claims, it seems that the limitation that the coating composition is "dirt repellant" was ignored. As is well understood, a prior art document must be considered as a whole, including those teachings of the prior art document which lead away from the claimed invention, and distilling an invention down to a "gist" or "thrust" disregards the "as a whole" requirement. It is asserted that the specific limitation that the coating is "dirt repellant" in view of the teachings that the prior art documents describe acrylic adhesive systems demonstrates that the critical limitation of a surface coating forming a dirt repellant surface was indeed overlooked.

It appears that in view of the basis for the rejection of the claims, the rejection of the claims assumes that coatings having the same constituents (an acrylate system) will naturally have the same properties. Applicants submit that this is not true. As is well known, an "acrylate system, is not a specific compound, but includes a broad class of compounds having different properties. Acrylates are polymeric compounds, and they may differ in their degree of polymerization, and in substituents, functional groups, and they may be of the homopolymeric or copolymeric type. By varying the molecular constitution, the properties of the acrylates can be adapted for specific applications.

In the pending claims, the acrylate system must obviously be one that repels dirt. As such, such acrylate system of the pending claims cannot be one that is considered as an adhesive. Therefore, while the prior art documents cited in the outstanding office action disclose an "acrylate system," these acrylate systems are not of the type that are required by the claims which repel dirt.

3. Rejection of claims 18, 21-23, 25, 27-28 and 46 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,380,695 (Chiang et al.)

Claims 18, 21-23, 25, 27-28 and 46 presently stand rejected in view of the disclosure of Chiang et al. This rejection is respectfully traversed on the basis that the Chiang et al. disclosure fails to disclose or suggest each and every feature of the security paper recited claim 18 of the pending application. Therefore, claim 18 is patentable. Claims 21-23, 25, 27-28 and 46 are patentable based on their dependency from claim 18 and their individually recited features.

The Chiang et al. disclosure describes an ID card having a security pattern with a paper support that can be plastic and have a polymeric security layer comprising an acrylate material. Contrary to the assertion in the Office action, however, the polymeric security layer of the Chiang et al. disclosure does not protect the paper layer. Instead, the security layer is provided between the support sheet and an image receiving layer of the ID card, adhering strongly to both.

The security layer is described as having a cohesivity less than the adhesivity of the layer for the support sheet and the image receiving layer. Therefore, the security layer is destroyed if an attempt is made to separate the image receiving layer from the support sheet, and the security pattern included in the security layer is also destroyed (column 2, line 52 to column 3, line 17).

While the Chiang et al. disclosure indicates that acrylates are suitable materials for the security layer, this disclosure fails to teach that the acrylates constitute the sole binder. The Chiang et al. disclosure also teaches that the acrylates should include inorganic fillers in the security layer (column 7, lines 38-45). In addition, the Chiang et al. disclosure indicates that the security layer is permeated by printing indicia (column 7, lines 28-33). As would be readily understood by one of ordinary skill in the art, a dirt repellant coating, as recited in the pending claims, should not allow permeation or diffusion into the bulk of the layer.

In view of these observations, it is submitted that the Chiang et al. disclosure fails to teach or suggest each and every feature of the dirt repellant surface coating of claims 18, 21-23, 25, 27-28 and 46. Therefore, withdrawal of this rejection is respectfully requested.

4. Rejection of claims 19 and 29 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,380,695 (Chiang et al.)

This rejection is traversed on the basis that the Chiang et al. disclosure fails to disclose or suggest the dirt repellant surface coating of the invention as described above in connection to claim 18. Claim 19 depends from claim 18 and is patentable based on the previous observations. Claim 29 recites a document of value comprising a security paper having the same features of the security paper of claim 18. This claim is also patentable in view of the observations on claim 18.

It is submitted that both claims 19 and 29 are patentable based on the distinctions made above on the Chiang et al. disclosure, and the patentable dirt repellant surface coating described in claim 18. Accordingly, withdrawal of this rejection is respectfully requested.

5. Rejection of claim 26 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,380,695 (Chiang et al.) in view of U.S. Patent 5,525,400 (Manser et al.)

This rejection is traversed on the basis the Chiang et al. and Manser et al. disclosures, whether considered collectively or individually, fail to disclose or suggest the security paper recited in claim 26. Claim 26, which depends from claim 18, is patentable based on its dependency from claim 18 and its individually recited features.

The Manser et al. disclosure fails to make up for the basic shortcomings of the Chiang et al. disclosure, as described above. The Manser et al. disclosure describes a laminated structure which is bonded with a UV-curable and/or VIS-curable adhesive composition (column 1, lines 6-9, 44-47; column 2, lines 7-12).

As discussed previously, adhesives are wholly unsuitable as a dirt repellant surface. Therefore, the Manser et al. disclosure provides teachings in direct conflict with the limitations of claim 18, and hence claim 26.

The Manser et al. disclosure fails to disclose that acrylates are the sole binder in the adhesive composition, and that the composition is free of fillers. On the contrary, the examples provided by the Manser et al. disclosure comprise binders that are different from the acrylate binders (column 4, lines 5-19). As a result, the Manser et al. disclosure cannot constitute a teaching that is relevant to claim 26.

The Manser et al. disclosure provides teachings that are not compatible with the proposed combination of the Chiang et al. and Manser et al. disclosures that would teach the security paper of claim 18.

In view of these observations, it is clear that there is no teaching or suggestion among either the Manser et al. and Chiang et al. disclosures that would motivate one skilled in the art to make the security paper of claim 26.

Therefore, as a result of the contrary teachings of the Manser et al. disclosure, and the shortcomings of the Chiang et al. disclosure, withdrawal of this rejection is respectfully requested.

6. Rejection of claim 24 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,380,695 (Chiang et al.) in view of U.S. Patent 4,856,857 (Takeuchi et al.)

This rejection is traversed on the basis the Chiang et al. and Takeuchi et al. disclosures, whether considered collectively or individually, fail to disclose or suggest the security paper recited in claim 24. Claim 24, which depends from claim 18, is patentable based on its dependency from claim 18 and its individually recited features.

The Takeuchi et al. disclosure fails to make up for the basic shortcomings of the Chiang et al. disclosure, as described above. The Takeuchi et al. disclosure

describes a transparent-type hologram that comprises specific layers, and a hologram transfer sheet (column 2, lines 18-48). The hologram transfer sheet comprises an adhesive layer for plastering the hologram onto a transfer medium (column 12, line 17; column 14, lines 14-17). While the Takeuchi et al. disclosure mentions numerous examples for the adhesive, among such examples being poly(meth)acrylic resin, it is not disclosed that acrylates shall constitute the sole binder, and it is not disclosed that the adhesive shall lack a filler substance (column 14, lines 17-33).

In addition, even though tackifiers on the basis of acrylates are mentioned as constituents of the adhesive layer (column 14, lines 34-44), such material is not suitable as a dirt repellant surface coating.

In view of these observations, it is clear that there is no teaching or suggestion among either the Takeuchi et al. and Chiang et al. disclosures that would motivate one skilled in the art to make the security paper of claim 26.

Therefore, as a result of the contrary teachings of the Takeuchi et al. disclosure, and the shortcomings of the Chiang et al. disclosure, withdrawal of this rejection is respectfully requested.

7. Rejection of claims 29-34 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,817,205 (Kaule) in view of U.S. Patent 5,380,695 (Chiang et al.)

This rejection is respectfully traversed on the basis that the Kaule and the Chiang et al. disclosures, whether considered individually or collectively, fail to disclose or suggest each and every feature of the document of value of pending claim 29, and every step of the method of claim 30 of the pending application. Moreover, claims 31-34 are patentable based on their dependency from claim 30 and their individually recited features.

The shortcomings of the teachings of the Kaule disclosure, as applied to claims 29-34, are described at length in the reply to the Office action of June 23,

2004. Moreover, the deficiencies of the Chiang et al. disclosure are described in detail in reference to claim 18.

In brief, the Kaule disclosure does not describe protective coatings that include an acrylate system as the sole binder and lacking a filler substance. There is simply no evidence in the Kaule disclosure or that placed in the Office action that would motivate a skilled artisan to provide a surface coating having these features.

The Chiang et al. disclosure does not disclose a surface coating layer on the basis of an acrylate material which protects the paper layer. Rather, the acrylate layer disclosed by the Chiang et al. disclosure is an adhesive layer that holds together two layers of the ID card. It is not to provide a protective surface coating. Moreover, the Chiang et al. disclosure neither discloses that the adhesive layer contains acrylates as the sole binder, nor that the adhesive layer lacks a filler substance.

In view of these observations, it is readily evident that neither the Kaule disclosure nor the Chiang et al. disclosure provide sufficient teachings that would motivate one skilled the art to provide a surface coating of the type described and required by both claims 29 and 30. Moreover, it is shown by the basic deficiencies of the Chiang et al. disclosure that the proposed combination of the Kaule and Chiang et al. disclosures would not result in the document of value of claim 29 or the method of claim 30. The Chiang et al. disclosure describes an adhesive layer that is not only unsatisfactory for a dirt repellant surface coating, but the acrylate layer teachings of the Chiang et al. disclosure are not even used to provide a surface coating. Instead, the acrylic layer of the Chiang et al. disclosure is provided to adhere two layers of the ID card together.

Therefore, as a result of the contrary teachings of the Chiang et al. disclosure, and the shortcomings of the Kaule disclosure, withdrawal of this rejection is respectfully requested.

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8. Conclusion

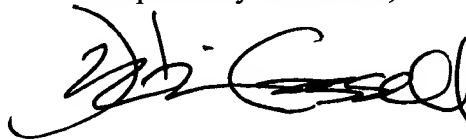
In view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is respectfully requested that claims 18, 19, 21-34 and 46 be allowed and the application be passed to issue.

If any issues remain that may be resolved by a telephone or facsimile communication with the Applicants' Attorney, the Examiner is invited to contact the undersigned at the numbers shown below.

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Respectfully submitted,

A handwritten signature in black ink, appearing to read "Justin J. Cassell", written over a horizontal line.

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